

Work Order ID 158618

Tuesday, March 28, 2017 1:06:16 PM

158618

50128906
U/R Page 1

Item ID: 6F9540V00231 **POSITIVE RECALL** Accept ***N9000040100*** Setup Start ***NS1***
Revision ID: URF 16-692 Stop ***NS2***
Item Name: AW169 Lower Cutter Installation Assembly
Start Date: 4/7/2017 Start Qty: 1.00 ***1*** Cust Item ID: **F.A.I.R. COMPLETION**
Required Date: 4/13/2017 Req'd Qty: 1.00 ***1*** Customer: **REQUIRED**
Reference: SCHEDULED/C **CONCESSION 400000061786**
Approvals: Process Plan: *[Signature]* Date: **MAR 28 2017** Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D169-841	B	<i>OK 4/13/28</i> MAR 29 2017	DAS 6 9-89						
100	DOCUMENT CONTROL								
100	DC	Memo	0.00						
Doc.Control -USB or Paperwork	Photocopy bluefile per PPP D169-841-015 chg002 and create labels per 6F9540V00231 CHG002								DAS 28 9-89 APR 13 2017
110	Pick Kit	0.00							
110	Packaging	Memo	0.00						
Packaging									MATERIAL CERTIFICATION REQUIRED F.A.I.R. COMPLETION REQUIRED DAS 6 9-89 DAS 27 9-89 MAR 29 2017
120	QC4- 100% Inspect kits for completeness	0.00							
120	QC	Memo	0.00						
Quality Control	<i>* ARC MUST BE CREATED by QA</i> <i>* ARC MUST contain Concession Number</i> <i>* All Parts MUST be identified w/ concession number.</i> <i>* FAIR MUST be completed</i>								DAS 28 9-89 APR 13 2017 POSITIVE RECALL EFFECTIVE 7/4/13 AUTH 5 RELEASED PD DATE 11/04/07 CONCESSION 400000061786

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

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Item ID: 6F9540V00231 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 16-692 Stop ***NS2***
Item Name: AW169 Lower Cutter Installation Assembly
Start Date: 4/7/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 4/13/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130	Memo	0.00				DAS 27 9-89			
Packaging	Identify and pack for shipping as per PPP 6F9540V00231								
									APR 13 2017
140	QC21- Final Inspection - Work Order Release	0.00							APR 13 2017
140	Memo	0.00					DAS 21 9-89		
QC									
Quality Control									
								DAS 21 9-89	APR 07 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 158618

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Parent Item: 6F9540V00231

6F9540V00231

Parent Item Name: AW169 Lower Cutter Installation Assembly

Start Date: 4/7/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 13.11.13 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D169-841-015		Manufactured	No				Each	0.0000		1			

D169-841-015

AW169 Lower Cutter

**

158628

MAR 29 2017

DAS
28
9-89

DAS
6
9-89
DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

		Supplier Concession				PAGE 1 of 2	PLANT Leonardo Helic. - Vergiate
Supplier NC N.	AWC 006/01	Date	02.02.2017	AW Concession	400000061786	Purchase Order	4801373666
P/N	6F9540V00231			Grade/Category	NC	Drawing Issue	
Part Description	PROTECTR, CCP ASSY LOWER			Batch Quantity	20,000	Defective Quantity	20,000
AW NC	GUIDO BRUSCINO					A/C Type/Model	AW6
Supplier	DART AEROSPACE LTD					Contract	
Defect F001 - Wrong dimensions - * 02.02.2017 09:40:16 GUIDO BRUSCINO (40067) * see supplier document attached - B/N quantities and PO's listed in the Cause of Defect							
Repetitiveness (same P/N - Defect Code) NO ☒ YES ☐ Follow							
ENGINEERING Evaluation and Proposal							
Engineering Evaluations, including Specialist inputs:				Investigation Report n.		Compliance Report n.	
* 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * The part is acceptable with the action proposed by the supplier applied.							
Classification of Deviation from Type Design i.a.w. EASA Part 21A.91 : Minore/B							
Defect effect				Limitations			
	Before Repair		After Repair				
Safety	☐ YES	☐ YES	☐ YES	☐ NO	☐ YES (to specificity) ☒ NO		
Life or Duration	☐ YES	☐ YES	☐ YES	☐ NO			
Strenght	☐ YES	☐ YES	☐ YES	☐ NO			
Performances	☐ YES	☐ YES	☐ YES	☐ NO			
Interchangeability	☐ YES	☐ YES	☐ YES	☐ NO			
Reliability	☐ YES	☐ YES	☐ YES	☐ NO			
Maintainability	☐ YES	☐ YES	☐ YES	☐ NO			
Installability	☒ YES	☐ YES	☒ YES	☐ NO			
Testability	☐ YES	☐ YES	☐ YES	☐ NO			
Only Appearance	☐ YES	☐ YES	☐ YES	☐ NO			
No Effect	☐ YES						
Repair Proposal:				Decision			
* 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * See attached supplier document.				☐ Use rep. with spec.repair(not yet applied) ☒ Use repaired with known repair(yet applied) ☐ Use As Is ☐ Use repaired for tests only(see Limitations) ☐ Use As Is for tests only(see Limitations) ☐ Scrap			
Concession Classification		☐ MAJOR ☒ MINOR		Re-submit after Repair		☐ YES ☒ NO	
Mark part with Concession		☒ NO ☐ YES		Method :			
ATE	MARCELLO STEFANELLI		CPE			Date	10.02.2017
Checks and tests to be performed							
Repair registration with repair WO ☒ Number:							
Repair Evaluation:							
Final Decision							
S/N	Use As Is (UTI)	Use Repaired (R/L)	Scrap (SCA)	S/N	Use As Is (UTI)	Use Repaired (R/L)	Scrap (SCA)
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
Not Serialized	Use As Is (Q.ty)	Use Repaired (Q.ty)	Scrap (Q.ty)				
Role	AW ATE	AW CPE	Inspection Clearance Repair	Quality	Customer	MoD or Authority Representative	
Signature	MARCELLO STEFANELLI						
Date	10.02.2017						



Supplier Concession

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2 of 2

PLANT
Leonardo Helic. - Vergiate

Supplier NC N.	AWC 006/01	Date	02.02.2017	AW	400000061786	Purchase Order	4801373666
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DEFECT 0001

FO01

Wrong dimensions

attachment

 AgustaWestland A Finmeccanica Company		CONCESSION				Pag. 1 of 2	
Manuf. Doc. N.	AWC 006	Date		AW Doc. N.		Purchase Order	4800671131 4800722284 4801147764 4801186922 4801218851 4801288960 4801373666
AW P/N	6F9540V00231	S/N / Batch Number	B109195 Qty. (1) B133355 Qty. (2) B134314 Qty. (1) B134315 Qty. (1) B134842 Qty. (1) B137492 Qty. (1) B137355 Qty. (2) B137816 Qty. (1) B137818 Qty. (1) B137817 Qty. (1) B140379 Qty. (3) B140381 Qty. (2) B147002 Qty. (2) B150786 Qty. (1)	Grade	A	AW Drawing Issue	B
Description	Lower Cutter Assy			Batch Q.ty	20	Defective Q.ty	20
Manufacturer	Dart Aerospace			Model	AW169		
Defect(s) Description							
Leonardo has informed Dart that there are interference issues installing the lower cable cutter D4842-041 onto the Leonardo interface bracket.							
				Department	Inspector	Signature	Date
				Quality	DAS 16 9-89		2017/02/01
Defect(s) Cause							
The Lower Cutter body has a dimension of 10.9 +0.25/-0.00 mm. This dimension was reported as part of the approved FAI and has been met with all delivered product.							
				Department	Inspector	Signature	Date
				Quality	DAS 16 9-89		2017/02/01
Corrective Action						Complete Before	
In order to mitigate the interference issue for Leonardo, Dart is proposing to remove sufficient material to make the overall installation dimension at 22.15 mm +0.05/-0.35.							
				Department	Inspector	Signature	Date
				Quality	DAS 16 9-89		2017/02/01

For "MANUFACTURER" SUPPLIERS ONLY
ENGINEERING evaluation and proposal

Engineering evaluation

 Investigation report
 Compliance report

 n.....
 n.....

Dart's position is that this change will not impact the structural substantiation presented in Report DA169-4 for the lower cutter body since this is not a section with the lowest margin. Therefore removing 0.3 mm max from each part will not impact the structural integrity of the lower cutter assembly. The dimension on the cutter body part D4842-3/-4 will be 10.80 +0.00/-0.200.

The dimension change of the two lower cutter body parts mating, plus the sealant, anodize and primer layers will be defined as a dimension of 22.15 +0.05/-0.35 mm on the assembled lower cutterbody and will be incorporated into the D4842 drawing for inspection.

	Defect effects		Limitations
	Before any repair	After any repair	
	☐ yes	☐ yes ☐ no	☐ yes (specify) ☒ no
Safety	☐ yes	☐ yes ☐ no	
Life	☐ yes	☐ yes ☐ no	
Strength	☐ yes	☐ yes ☐ no	
Performances	☐ yes	☐ yes ☐ no	
Interchangeability	☐ yes	☐ yes ☐ no	
Reliability	☐ yes	☐ yes ☐ no	
Maintainability	☐ yes	☐ yes ☐ no	
Installability	☒ yes	☐ yes ☒ no	
Testability	☐ yes	☐ yes ☐ no	
Only aspect	☐ yes	☐ yes ☐ no	
Repair Proposal		Decision to use	
None		☐ Use repaired with specific repair ☐ Use repaired with known repair ☐ Use as is ☐ Use repaired for tests (see Limitations) ☐ Use as is for tests (see Limitations) ☒ Scrap	
Concession Classification		☒ Major ☐ Minor	Submit after repair
			☐ yes ☐ no